



State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
(603) 271-3503 FAX (603) 271-2982



May 14, 2002

Mr. J. Esposito Alexant, P.E.
Director, Department of Public Works
Town of Jaffrey
Public Works Office
23 Knight Street
Jaffrey, NH 03452

Re Administrative Order WD 02-01
Jaffrey Wastewater Treatment Facility ("WWTF")

Dear Mr. Alexant

On May 10, 2002, the Department of Environmental Services ("DES") met with the Town of Jaffrey's consultant Wright-Pierce ("W-P") and W-P's subcontractor ENSR International ("ENSR") to discuss the status of the hydrogeologic work for the Rapid Infiltration Basins ("RI Basins"). As you know Administrative Order No. WD 02-01 ("Order") requires that a hydrogeologic study report for the selected RI Basin property be submitted by **June 3, 2002**. W-P and ENSR explained that due to delays getting started with the field work portion of the hydrogeologic work, Jaffrey could potentially miss this deadline if the current property under study is not favorable for the RI Basins. Prior to issuing this Order, DES negotiated the Order schedule with Jaffrey and W-P with the understanding that the deadlines in the Order were both reasonable and achievable. Based on discussions at this meeting, DES' opinion is that the delays that prevented the hydrogeologic work from proceeding as needed to meet the AO schedule were primarily administrative in nature and were avoidable and therefore unacceptable.

During this May 10, 2002 meeting, we also discussed the status of the water supply system corrosion control work. W-P indicated that Jaffrey is now increasing the pH of the drinking water to approximately pH 8.8-9 and this seems to be effective in reducing the copper concentration down to approximately 30 µg/l in the influent and 16 µg/l in the effluent of the WWTP. This data indicates that Jaffrey can make significant reductions in copper concentrations by controlling the pH on the water supply side of the system and should continue these efforts.

As previously mentioned, DES is still considering issuing administrative fines for the copper violations that occurred due to running out of potassium hydroxide and will also consider fines if the June 3, 2002 deadline is not fully and completely met.

If you have questions regarding this letter or would like to arrange a meeting with DES, please contact me at (603) 271-3307.

Sincerely,

A handwritten signature in black ink that reads "Sharon L. Ducharme". The signature is written in a cursive style with a large, stylized 'S' and 'D'.

Sharon L. Ducharme, P.E.
Supervisor, Compliance Section

CERTIFIED MAIL: 7099 3400 0003 0688 0832

cc: Harry T. Stewart, P.E., Director DES WD
John R. Bush, P.E., Administrator, DES WWEB
Franz Vail, P.E., DES WWEB
Gretchen Rule, DES Legal Unit
Joy Hilton, EPA Region 1
Jonathan Sistare, Jaffrey Town Manager
Victor Krea, P.E., Wright Pierce Engineers



State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
(603) 271-3503 FAX (603) 271-2982



February 28, 2002

Mr. J. Esposito Alexant, P.E.
Director, Department of Public Works
Town of Jaffrey
Public Works Office
23 Knight Street
Jaffrey, NH 03452

Re **Administrative Order WD 02-01**
Jaffrey Wastewater Treatment Facility ("WWTF")

Dear Mr. Alexant

On February 4, 2002, the Department of Environmental Services ("DES") received Wright-Pierce's ("W-P") Copper Corrosion Control Program Status Report for the Town of Jaffrey, New Hampshire ("Report"). This Report fails to meet the requirements of the Administrative Order WD 02-01 ("Order").

The Order specifically requires that Jaffrey "submit an updated status of the copper corrosion control optimization program for the Jaffrey water distribution system to DES for review. **The status report shall include a work scope of tasks to be completed and a proposed implementation schedule for these tasks**".

The Report submitted to DES did not include a work scope of tasks to be completed or an implementation schedule for these tasks. The Report referenced previously recommended actions but failed to indicate which actions will actually be implemented and when these tasks will be implemented.

DES considers the failure of the pH adjustment system due to running out of potassium hydroxide during the summer of 2001 to be unacceptable. Jaffrey must be more vigilant in monitoring the system and should consider installing level controls on the potassium hydroxide tanks to provide alarms when levels are low. The WWTF effluent copper concentrations have been elevated for four months at this time. W-P indicated that they believed the copper concentrations were elevated due to running out of potassium hydroxide during the summer. DES questions this conclusion since the copper concentrations continue to be elevated. DES also questions whether the corrosion control system is being properly operated and maintained.

DES considers item E.1. of the Order to be unresolved and is now considering issuing administrative fines. The fines may include up to \$2,000 per month for each month that this Order item remains unresolved and may include additional fines for copper violations

occurring due to inadequate operation and maintenance of the water supply corrosion control system.

If you have questions regarding this letter or would like to arrange a meeting with DES, please contact me at (603) 271-3307.

Sincerely,



Sharon L. Ducharme, P.E.
Supervisor, Compliance Section

CERTIFIED MAIL: 7099 3400 0003 0688 7572

cc: Harry T. Stewart, P.E., Director DES WD
John R. Bush, P.E., Administrator, DES WWEB
Franz Vail, P.E., DES WWEB
~~Gretchen Rule, DES Enforcement Coordinator~~
Joy Hilton, EPA Region 1
Jonathan Sistare, Jaffrey Town Manager
Victor Krea, P.E., Wright Pierce Engineers



State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
(603) 271-3503 FAX (603) 271-2982



February 5, 2002

Jonathan Sistare
Town Manager
Town of Jaffrey
Town Manager's Office
10 Goodnow Street
Jaffrey, NH 03452

Subject Administrative Order No. WD 02-01

Dear Mr. Sistare:

Please find attached Administrative Order No. WD 02-01 (Order) issued by the Department of Environmental Services, Water Division (DES), to the Town of Jaffrey (Jaffrey). This Order contains the schedule that we discussed and agreed to during our January 7, 2002 meeting.

If you have any questions regarding this Order, please contact me at (603) 271-3307.

Sincerely,

Sharon L. Ducharme, P.E.
Compliance Supervisor
Wastewater Engineering Bureau

Attachment: Administrative Order No. WD 02-01

cc As listed on Order



State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES
6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
(603) 271-3503 FAX (603) 271-2982



Town of Jaffrey
10 Goodnow Street
Jaffrey, NH 03452

Re: Jaffrey WWTP

ADMINISTRATIVE ORDER

No. WD 02-01
January 25, 2002

A. INTRODUCTION

This Administrative Order No. WD 02-01 is issued by the Department of Environmental Services, Water Division, to the Town of Jaffrey pursuant to RSA 485-A:22. This Order is effective upon issuance.

B. PARTIES

1. The Department of Environmental Services, Water Division ("DES"), is a duly constituted administrative agency of the State of New Hampshire, having its principal office at 6 Hazen Drive, Concord, NH 03301.
2. The Town of Jaffrey ("Jaffrey") is a municipality established under laws of the State of New Hampshire, having a mailing address of 10 Goodnow Street, Jaffrey, NH 03542.

C. STATEMENT OF FACTS AND LAW

1. Pursuant to RSA 485-A:13 and related sections, DES regulates the discharge of pollutants to surface waters under a permit system. As part of this program, the Commissioner of DES adopted Env-Ws 401 - 405 relating to Surface Water Discharge Permits and adopted Env-Ws 1700 establishing Surface Water Quality Regulations for the state's surface waters.
2. Jaffrey owns and operates a wastewater treatment facility located on Old Sharon Road, Jaffrey, New Hampshire, hereinafter referred to as "the Facility".
3. Operation of the Facility is permitted under the terms of a federal National Pollutant Discharge Elimination System ("NPDES") permit (NH0100595) issued by the United States Environmental Protection Agency ("USEPA") to Jaffrey on July 30, 2001 and effective on October 1, 2001. This NPDES permit supercedes the NPDES permit issued on September 22, 1994 ("the 1994 NPDES Permit"). This NPDES permit also constitutes a State discharge permit adopted pursuant to RSA 485-A:13, I(a) and Env-Ws 401-405. The current federal and state permits are collectively referred to hereinafter as the "2001 NPDES Permit".

4. Pursuant to Laws of 1967, 311:1, the Contoocook River and its tributaries are classified as Class B waters.
5. Pursuant to RSA 485-A:8, II, there shall be no disposal of sewage or waste into Class B waters except those that have received adequate treatment to prevent the lowering of the biological, physical, chemical or bacteriological characteristics below those stated in RSA 485-A:8, II. Disposal of waste shall not be harmful to aquatic life or to the maintenance of aquatic life in said receiving waters. Further, Class B waters shall be acceptable for swimming, fishing and other recreational purposes.
6. RSA 485-A:12, I prohibits the discharge of any sewage or wastes to a surface water in such a manner as will lower the quality of the water below the minimum requirements of the adopted classification.
7. Env-Ws 1700 establishes water quality standards for the state's surface water uses as set forth in RSA 485-A:8, I, II, III and V.
8. The 1994 NPDES Permit authorized and the 2001 NPDES Permit authorizes Jaffrey to discharge treated wastewater from the Facility to the Contoocook River, subject to effluent limitations, monitoring requirements and other conditions
9. To maintain State Water Quality Standards, the 1994 NPDES Permit and the 2001 NPDES Permit require Jaffrey to meet more stringent discharge limits than their Facility's existing capability.
10. The Facility previously has discharged wastewater to the Contoocook River that violated the 1994 NPDES Permit and currently discharges wastewater to the Contoocook River that violates the 2001 NPDES Permit.
11. DES issued Administrative Order No. WD 95-07 on March 6, 1995 to order Jaffrey to design and construct modifications to the Facility so as to comply with effluent limitations specified in the 1994 NPDES Permit. Interim permit limits were set as part of this Order.
12. DES amended Administrative Order No. WD 95-07 on July 17, 1995 to allow Jaffrey time to study the impact of infiltration and inflow (I/I) on the Facility and to examine the feasibility of participating in a regional wastewater treatment facility.
13. DES issued a Second Amendment to Administrative Order No. WD 95-07 on August 15, 1997 to revise the interim limits with more stringent limitations and monitoring requirements for BOD, TSS and total ammonia. DES also extended the deadline for completion of the Facility upgrade to December 1, 2001.
14. DES issued a Third Amendment to Administrative Order No. WD 95-07 on February 7, 2001. This amendment required Jaffrey to submit a Preliminary Engineering Report to DES by November 29, 2001 with several interim deadlines based on Jaffrey's submitted workscope and schedule.

15. DES issued a Fourth Amendment to Administrative Order No. WD 95-07 on March 20, 2001 to extend one of the interim deadlines as requested by Jaffrey.

16. Jaffrey submitted the Preliminary Engineering Report (report) prepared by Wright-Pierce to DES by November 29, 2001 ("Wright-Pierce Report"). The Wright-Pierce Report recommended selected Facility upgrades and seasonal discharge scenarios (summer discharge to rapid infiltration basins and winter discharge to the Contoocook River).

17. Administrative Order No. WD 95-07 (as amended) set the following interim discharge limits effective from August 15, 1997 until December 1, 2001:

	Average Monthly	Average Weekly	Maximum Day
	mg/l (lbs/day)		
BOD5 (May 1-Oct 31)	14 (117)	17 (142)	20 (167)
TSS (May 1-Oct 31)	14 (117)	17 (142)	20 (167)
BOD5 (Nov 1-Apr 30)	20 (167)	40 (334)	45 (375)
TSS (Nov 1-Apr 30)	20 (167)	40 (334)	45 (375)

18. NPDES Permit Part I. Footnotes.A.1(e) requires that the discharge shall maintain a minimum of 85 percent removal of TSS and BOD.

19. For the monitoring period of September 1997 through November 2001, DES recorded 51 exceedances of the BOD interim discharge limits (inclusive of daily maximum, weekly and monthly average concentration and mass limits and percent removal). Attachment 1 identifies these exceedances.

20. For the monitoring period of September 1997 through November 2001, DES recorded 47 exceedances of the TSS interim discharge limits (inclusive of daily maximum, weekly and monthly average concentration and mass limits and percent removal). Attachment 2 identifies these exceedances.

21. For the monitoring period of September 1997 through November 2001, DES recorded 18 toxicity violations of the NPDES permit and interim discharge limits. Attachment 3 identifies these exceedances.

22. For the monitoring period of September 1997 through November 2001, DES recorded 131 exceedances of copper water quality criteria. Attachments 4 and 5 identify these exceedances.

D. DETERMINATION OF VIOLATIONS

1. Jaffrey violated NPDES permit No. NH0100595 by discharging wastewater that does not meet the effluent limitations specified in the 1994 and 2001 NPDES Permits.
2. Jaffrey violated RSA 485-A:12,I by discharging wastewater that lowers the water quality of the Contoocook River below the minimum requirements of the adopted classification.
3. Jaffrey violated Administrative Order No. WD 95-07 by discharging wastewater that does not meet the interim discharge limits set forth in the Order.
4. Jaffrey violated Env-Ws 1703.21 by discharging wastewater that exceeds the water quality criteria for copper.

E. ORDER

The purpose of this Order is to set a new schedule to complete the Facility upgrade and rapid infiltration basin design and construction as proposed in the Preliminary Engineering Report. This Order supercedes all conditions set forth in Administrative Order No. WD 95-07. Administrative Order No. WD 95-07 is hereby closed. Based on the above findings, DES hereby orders Jaffrey as follows:

Copper Corrosion Control

1. By **February 4, 2002**, submit an updated status of the copper corrosion control optimization program for the Jaffrey water distribution system to DES for review. The status report shall include a work scope of tasks to be completed and a proposed implementation schedule for these tasks. Upon DES approval of this work scope and schedule, Jaffrey shall implement the approved work scope in accordance with the approved schedule.

Facility Phase I Upgrade

2. By **April 8, 2002**, submit 90% complete design plans and specifications to DES for the Facility Phase I upgrade. The Facility Phase I upgrade shall include at a minimum: sludge removal, aeration system upgrade and effluent meter upgrade as proposed in the November 26, 2001 Wright-Pierce Memorandum to Jes Alexant and Lew Gregory ("November 26, 2001 memo"). These plans must also include a design to provide adequate air to the aeration system until the blowers are upgraded.
3. **Within 14 days of the postmark date of DES' comment letter**, submit approvable and complete final design plans and specifications for the Facility Phase I upgrade to DES for approval. This submittal must incorporate all of DES' comments generated from the April 8, 2002 submittal and be ready for bid advertisement.
4. By **May 13, 2002**, advertise for construction bids for the Facility Phase I upgrade as approved by DES.

5. By **September 3, 2002**, issue Notice to Proceed to contractor for construction of the Facility Phase I upgrade as approved by DES.
6. By **February 7, 2003**, complete construction of Facility Phase I upgrade as approved by DES

Rapid Infiltration Basins, Facility Phase II Upgrade and Permit Modification

7. By **June 3, 2002**, complete and submit to DES a hydrogeologic study report for the selected property to be used for the rapid infiltration basins. This report shall include at a minimum groundwater contours, mounding analysis, a preliminary plan predicting groundwater discharge zone boundaries and a modeling analysis of the groundwater divide between the Gridley and Contoocook River watersheds.
8. By **August 1, 2002**, complete and submit a preliminary design for the rapid infiltration basins. The rapid infiltration basin preliminary design shall include, at a minimum: purchase and sales agreement for the land to be used for the rapid infiltration basins, basin flooding test and modeling results, basis of design for rapid infiltration basins, a final plan depicting groundwater discharge zone boundaries and a complete application package for a groundwater discharge permit.
9. By **August 1, 2002**, complete and submit a preliminary design for the remaining Facility upgrade work ("Facility Phase II upgrade") as described in the November 26, 2001 memo. The Facility Phase II upgrade must include, at a minimum, all the items described in the November 26, 2001 memo for both the Hadley Road Pump Station improvements and the wastewater treatment facility improvements.
10. By **September 23, 2002**, submit 90% complete design plans and specifications for the rapid infiltration basins and the Facility Phase II upgrade to DES for review.
11. **Within 30 days of the postmark date of DES' comment letter**, submit complete approvable final design plans and specifications for the rapid infiltration basins and the Facility Phase II upgrade. This submittal must incorporate all of DES' comments generated from the September 23, 2002 submittal and be ready for bid advertisement.
12. By **December 31, 2002**, submit a formal request for an NPDES permit modification for revised winter discharge limits and zero discharge during the summer months.
13. By **January 9, 2003**, advertise for construction bids for the rapid infiltration basins and the Facility Phase II upgrade as approved by DES.
14. By **April 30, 2003**, issue Notice to Proceed to contractor for construction of the rapid infiltration basins and the Facility Phase II upgrade as approved by DES.
15. By **April 30, 2004**, complete construction of the rapid infiltration basins and the Facility Phase II upgrade as approved by DES.

16. By **April 30, 2004**, permanently eliminate the discharge to the Contoocook River from the Facility for the period May 1 through November 30, 2004 and for the period May 1 through November 30 of every year thereafter.

17. Send all correspondence and all data, reports and other submissions required by this Administrative Order, **other than appeals**, to DES and EPA as follows:

Ms. Sharon L. Ducharme P.E.
DES-WD/WWEB
P.O. Box 95
Concord, NH 03302-0095

copy to: Ms. Joy Hilton
USEPA Region 1/Water Technical Unit
1 Congress St., Suite 1100
Boston, MA 02114-2023

F. INTERIM LIMITS

Jaffrey shall meet, at a minimum, the following interim discharge limits **from the date of this Administrative Order until February 7, 2003**. Any limit or permit condition not listed in this Order shall be complied with as described in the 2001 NPDES Permit. All sampling frequencies are as noted in the 2001 NPDES Permit.

	Average Monthly	Average Weekly	Maximum Day
	mg/l (lbs/day)		
BOD5 (May 1-Oct 31) (BOD5 replaces CBOD5 required in permit)	14 (117)	17 (142)	20 (167)
TSS (May 1-Oct 31)	14 (117)	17 (142)	20 (167)
BOD5 (Nov 1-Apr 30) (BOD5 replaces CBOD5 required in permit)	20 (167)	40 (334)	45 (417)
TSS (Nov 1-Apr 30)	20 (167)	40 (334)	45 (417)
Copper	30 µg/l	30 µg/l	30 µg/l
Ammonia, Nitrogen as N ₃	Report	Report	Report

From **February 8, 2003 until rapid infiltration basins are constructed and are operational or until April 30, 2004**, whichever comes first, Jaffrey shall meet, at a minimum, the following interim discharge limits. **After April 30, 2004**, Jaffrey shall meet the limits specified in the 2001 NPDES Permit, subject to any future modifications thereto. Any limit or permit condition not listed in this Order shall be complied with as described in the 2001 NPDES Permit, as it may be modified. All sampling frequencies shall be as noted in the 2001 NPDES Permit, as it may be modified.

	Average Monthly	Average Weekly	Maximum Day
	mg/l (lbs/day)		
BOD5 (May 1-Oct 31) (BOD5 replaces CBOD5 required in permit)	14 (117)	17 (142)	20 (167)
TSS (May 1-Oct 31)	14 (117)	17 (142)	20 (167)
BOD5 (Nov 1-Apr 30)	14 (146)	23 (240)	40 (417)

(BOD5 replaces CBOD5 required in permit)

TSS (Nov 1-Apr 30)	14 (146)	23 (240)	40 (417)
Copper	20 µg/l	20 µg/l	20 µg/l
Ammonia, Nitrogen as N ₃	Report	Report	Report

G. REPORTING

1. Beginning with the first calendar month following the month that this Administrative Order is issued, and for each month thereafter, as well as at the dates of each deadline set forth in Section E above, continuing until completion of all actions required in Section E, Jaffrey shall submit in writing to DES and EPA a report detailing the status and progress of actions required under Section E. Notification shall include:

- Brief description of work completed under each item.
- Brief description of noncompliance/compliance with the Order, interim limits and NPDES permit, including specific dates.
- Brief description of actions taken or proposed by the permittee to ensure compliance with the dates and interim limits specified in Sections E and F, respectively.

The reports shall be postmarked no later than the fifteenth day of the month immediately following the reporting month.

2. The aforementioned reporting requirements are in addition to any other reports Jaffrey is required to submit, and do not relieve Jaffrey of any obligations to submit any other report or information required or requested pursuant to the authority of its permits, New Hampshire statutes and rules adopted thereunder, or any other federal, state or local requirements. Jaffrey shall continue to meet NPDES permit limits and conditions except for the parameters and monitoring requirements specifically set forth above.

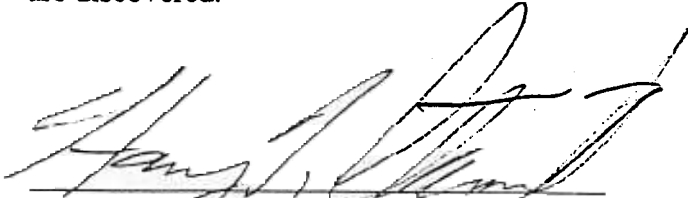
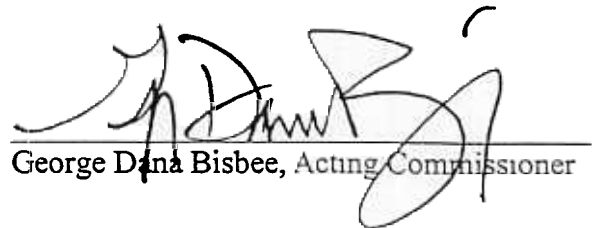
3. This Order does not constitute a waiver or a modification of the terms and conditions of the 2001 NPDES Permit. The 2001 NPDES Permit remains in full force and effect.

H. APPEAL

Any person aggrieved by this Order may appeal the Order to the Water Council by filing an appeal that meets the requirements specified in Env-WC 200 within 30 days of the date of this Order. Copies of the rule are available from the DES Public Information Center at (603) 271-2975 or at <http://www.des.state.nh.us/desadmin.htm>. Appealing the Order does not automatically relieve Jaffrey of the obligation to comply with this Order.

I. OTHER PROVISIONS

Please note that RSA 485-A:22 provides for administrative fines, civil penalties and criminal penalties for the violations noted in this Order, as well as for failing to comply with the Order itself. Jaffrey remains obligated to comply with all applicable requirements, in particular, but not limited to, all NPDES permit conditions and limits. DES will continue to monitor Jaffrey's compliance with applicable requirements and will take appropriate action if additional violations are discovered.


Harry T. Stewart, P.E., Director
Water Division
George Dana Bisbee, Acting Commissioner

Attachments: BOD Violations Summary
 TSS Violations Summary
 Toxicity Violations Summary
 Copper Data Summary
 Copper Effluent Concentration Plot

CERTIFIED MAIL/RRR: 7099 3400 0003 0689 5645

cc: Gretchen Rule, NHDES Enforcement Coordinator
 Joy Hilton, USEPA
 Sharon Ducharme, P.E., NHDES WEB
 Victor S. Krea, P.E., Wright-Pierce
 Jes Alexant, Town of Jaffrey
 Jennifer Patterson, NHAGO/EPB
 John R. Bush, P.E., Administrator, DES WWEB